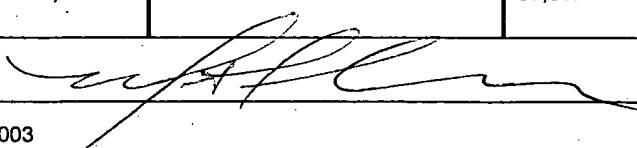
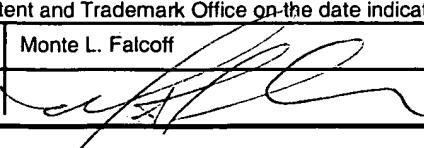


Please type a plus sign (+) inside this box → 

<b>TRANSMITTAL FORM</b> <i>(to be used for all correspondence after initial filing)</i>		<b>Application Number</b>	10/628,874
		<b>Filing Date</b>	July 28, 2003
		<b>First Named Inventor</b>	M. Dantus et al.
		<b>Group Art Unit</b>	
		<b>Examiner Name</b>	
<b>Total Number of Pages in This Submission</b>		<b>Attorney Docket Number</b>	6550-0000057/COC

ENCLOSURES (check all that apply)			
<input type="checkbox"/> Fee Transmittal Form  <input type="checkbox"/> Fee Attached  <input type="checkbox"/> Amendment / Response  <input type="checkbox"/> After Final  <input type="checkbox"/> Affidavits/declaration(s)  <input type="checkbox"/> Extension of Time Request  <input type="checkbox"/> Express Abandonment Request  <input checked="" type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s)  <input type="checkbox"/> Response to Missing Parts/ Incomplete Application  <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application)  <input type="checkbox"/> Drawing(s)  <input type="checkbox"/> Licensing-related Papers  <input type="checkbox"/> Petition  <input type="checkbox"/> Petition to Convert to a Provisional Application  <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address  <input type="checkbox"/> Terminal Disclaimer  <input type="checkbox"/> Request for Refund  <input type="checkbox"/> CD, Number of CD(s) _____		
	<input type="checkbox"/> After Allowance Communication to Group  <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences  <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)  <input type="checkbox"/> Proprietary Information  <input type="checkbox"/> Status Letter  <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):  HDP-1449 Form (29 Sheets and Attachment) and 341 Other Documents; HDP-1449 Form (5 Sheets) and 4 Foreign Patent Documents and 47 Other Documents		
	Remarks		
	The Commissioner is hereby authorized to charge any additional fees that may be required under 37 CFR 1.16 or 1.17 to Deposit Account No. 08-0750. A duplicate copy of this sheet is enclosed.		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm or Individual name	Harness, Dickey & Pierce, P.L.C.		Attorney Name Monte L. Falcoff
Signature			
Date	November 4, 2003		

CERTIFICATE OF MAILING/TRANSMISSION			
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Director of the U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450, or facsimile transmitted to the U.S. Patent and Trademark Office on the date indicated below.			
Typed or printed name	Monte L. Falcoff		
Signature		Date	November 4, 2003

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**PATENT**

Application No.: 10/628,874

Filing Date: July 28, 2003

Applicant: M. Dantus et al.

Group Art Unit:

Examiner:

Title: CONTROL SYSTEM AND APPARATUS FOR USE  
WITH LASER EXCITATION OR IONIZATION

Attorney Docket: 6550-000057/COC

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Director of the United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

**I. LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION**

The patents, publications and other information requested to be considered by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

**II. COPIES**

A. \_\_\_\_ Submitted herewith is a legible copy of (i) each U.S. patent application publication and U.S. and foreign patent; (ii) each publication or that portion which caused it to be listed; (iii) for each cited pending U.S. application, the application specification including the claims, and any drawing of the application which caused it to be listed including the claims directed to that portion; and (iv) all other information or that portion which caused it to be listed.

B. \_\_\_\_ Any patents, publications or other information which are listed on Form 1449 or on the copies of PTO-892, but which are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:

U.S. Serial Number

U.S. Filing Date

C. XXX Because the present application was/is being filed after June 30, 2003, no copies of the U.S. patents or U.S. patent application publications which are listed on the attached Form 1449 are enclosed pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i). Any foreign patent documents or non-patent literature listed on the attached Form 1449 are enclosed herewith.

D.       This is a PCT application in the entry of the National Phase in the United States. A copy of the International Search Report is attached for the Examiner's information. The documents listed on the International Search Report are listed on the attached Form-1449 for consideration by the Examiner and for listing on any patent resulting from this application. Since the International Search Report was from the US, EPO, or JPO search authorities, copies of these references should have been supplied to the USPTO under the trilateral agreement and are believed to be in the file of the above-identified application. (MPEP 1893.03(g))

III. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

A.       Except as may be indicated below in (B), all of the patents, publications or other information are in the English language (concise explanation not required).

B.       A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)):

1.       See the attached foreign patent office communication from a counterpart foreign application:
2.       English translations are provided:
3.       Other:

C. XXX The following additional information is provided for the Examiner's consideration. The references noted in the background of the present application are deemed to be of somewhat more relevance than the others cited. Also, the attached chart should assist the Examiner in categorizing the relevancy of the cited references (all reference numbers are for the 29-page 1449 form listing 341 documents filed concurrently herewith). Notwithstanding, the Examiner is requested to review all of the cited references and make his/her own relevancy determination.

IV. CROSS REFERENCE TO RELATED APPLICATION(S)

A. XXX The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By bringing this(these) application(s) to the Examiner's attention, Applicant(s) does(do) not waive the confidentiality provisions of 35 U.S.C. § 122.

<u>Serial No.</u>	<u>Filing Date</u>	<u>Art Unit</u>
10/265,211	October 4, 2002	2881

V. THIS IDS IS BEING FILED UNDER

A. XXX **37 C.F.R. § 1.97(b):** (check only one box)

1.  within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. § 1.97(b)(1)). No fee or certification is required.
2.  within three months of the date of entry of the national stage as set forth in §1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or certification is required.
3.  before the mailing of a first Office Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below; or, if no certification has been made, charge our deposit account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).
4.  before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No fee or certification is required.

B. 37 C.F.R. § 1.97(c): (check only one box)

before the mailing date of either any Final Office Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution.

1.  No certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).
2.  See the certification below. No fee is required.

C. 37 C.F.R. § 1.97(d):

after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee.

1.  See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

VI. CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box)

The undersigned hereby certifies that:

A.  each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)). See further statement under 37 C.F.R. 1.704(d) below in section VII, if applicable; or

B.  no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)).

C.  Some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS.

VII. STATEMENT UNDER 37 CFR 1.704(d)

The undersigned hereby states that:

each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this IDS.

VIII. PAYMENT OF FEES (check only one box)

A.  A check in the amount of \$180.00 is enclosed for the above-identified fee.

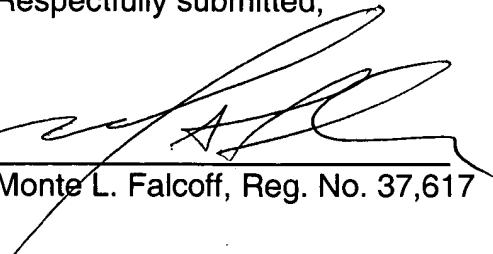
B.  Please charge Deposit Account No. 08-0750 in the amount of \$180.00 for the above-indicated fee. A duplicate copy of this paper is attached.

The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 08-0750.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 08-0750.

Respectfully submitted,

By:   
Monte L. Falcoff, Reg. No. 37,617

Dated: Nov. 4, 2003  
HARNESS, DICKEY & PIERCE, P.L.C.  
P.O. Box 828  
Bloomfield Hills, Michigan 48303  
(248) 641-1600

MLF/cmg

FORM HDP-1449 (Based on Form PTO-1449)		ATTORNEY DOCKET NO.	SERIAL NO.
		6550-000057/CPB	10/628,874
		APPLICANT	
		M. Dantus et al.	
		FILING DATE	GROUP
		July 28, 2003	

**PATENT AND TRADEMARK OFFICE**  
**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

Sheet 1 of 5

#### U.S. PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date
1.		5,526,171	06-11-1996	Warren		
2.		5,754,292	05-19-1998	Kane et al.		
3.		5,936,732	08-10-1999	Smirl et al.		
4.		6,042,603	03-28-2000	Fisher et al.		
5.		6,057,919	05-02-2000	Machida et al.		
6.		6,111,251	08-29-2000	Hillenkamp		
7.		6,130,426	10-10-2000	Laukien et al.		
8.		6,156,527	12-05-2000	Schmidt et al.		
9.		6,219,142 B1	04-17-2001	Kane		
10.		6,296,810 B1	10-02-2001	Ulmer		
11.		6,327,068 B1	12-04-2001	Silberberg et al.		
12.		6,337,606 B1	01-08-2002	Brombaugh et al.		
13.		6,421,154 B1	07-16-2002	Diels et al.		

#### FOREIGN PATENT DOCUMENTS

Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes	No
1.		WO 99/57318	11-11-1999	WO			
2.		WO 00/70647	11-23-2000	WO			
3.		WO 01/54323 A2	07-26-2001	WO			
4.		WO 02/061799 A2	08-08-2002	WO			

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM HDP-1449 (Based on Form PTO-1449)

**PATENT AND TRADEMARK OFFICE**  
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Sheet 2 of 5

ATTORNEY DOCKET NO.	SERIAL No.
6550-000057/CPB	10/628,874
APPLICANT	
M. Dantus et al.	
FILING DATE	GROUP
July 28, 2003	

**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)**

Ref. Desig.	Examiner's Initials	
1.		Teaching Laser to Control Molecules; Richard S. Judson et al.; Physical Review Letters; Vol. 68, No. 10, pp. 1500-1503 (March 9, 1992)
2.		Feedback-controlled femtosecond pulse shaping; T. Brixner, A. Oehrlein, M. Strehle, G. Gerber; Applied Physics B70, Laser and Optics (2000); pp. S119-S124
3.		Feedback Quantum Control of Molecular Electronic Population Transfer; Chemical Physics Letters; Christopher J. Bardeen et al.; (published prior to October 4, 2002) (19 pages)
4.		Compression Of Amplified Chirped Optical Pulses; Optics Communications; Donna Strickland et al.; Vol. 55, number 6; (15 October 1985), pp. 447-449
5.		Femtosecond laser pulse shaping by use of microsecond radio-frequency pulses; C.W. Hillegas et al.; Optics Letters, Vol. 19, No. 10 (May 15, 1994), pp. 737-739
6.		Ultrabroadband Femtosecond Lasers; Christian Spielmann et al.; IEEE Journal Of Quantum Electronics, Vol. 30, No. 4 (April 1994); pp. 1100-1114
7.		Programmable Shaping of Femtosecond Optical Pulses by Use of 128-Element Liquid Crystal Phase Modulator; Andrew M. Weiner et al.; IEEE Journal Of Quantum Electronics, Vol. 28, No. 4 (April 1992), pp. 908-920
8.		Back-side-coated chirped mirrors with ultra-smooth broadband dispersion characteristics; N. Matuschek et al.; Applied Physics B Lasers and Optics (6 Sept. 2000); pp. 509-522
9.		Femtosecond pulse shaping by an evolutionary algorithm with feedback; T. Baumert et al.; Applied Physics B Lasers and Optics (1997); pp. 779-782
10.		Adaptive real-time femtosecond pulse shaping; D. Meshulach et al.; Vol. 15, No. 5/May 1998/J. Opt. Soc. Am. B., pp. 1615-1619
11.		Femtosecond pulse shaping by dynamic holograms in photorefractive multiple quantum wells; Y. Ding et al.; Optics Letters/Vol. 22, No. 10/May 15, 1997, pp. 718-720
12.		Engineerable femtosecond pulse shaping by second-harmonic generation with Fourier synthetic quasi-phase-matching gratings; G. Imeshev et al.; Optics Letters/Vol. 23, No. 11/June 1, 1998, pp. 864-866
13.		Controlling the Future of Matter; Bern Kohler et al.; Acc. Chem. Res. 1995, 28, pp. 133-140

Examiner:

Date Considered:

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PATENT AND TRADEMARK OFFICE  
INFORMATION DISCLOSURE CITATION  
(Use several sheets if necessary)

Sheet 3 of 5

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
14.		High-Resolution, Ultrafast Laser Pulse Shaping and Its Applications; J.X. Tull et al.; Advances in Magnetic And Optical Resonance, Vol. 20, pp. 1-65 (1997)
15.		Femtosecond pulse shaping using spatial light modulators; A.M. Weiner; Review Of Scientific Instruments, Vol. 71, Number 5 (May 2000) pp. 1929-1960
16.		Chemistry with Photons; W.S. Warren; SCIENCE Vol. 262, 12 November 1993, pp. 1008-1009
17.		Transform-Limited Pulses Are Not Optimal for Resonant Multiphoton Transitions; Nirit Dudovich et al.; Physical Review Letters, Volume 86, Number 1 (1 January 2001) pp. 47-50
18.		Laser scanning third-harmonic-generation microscopy in biology; D. Yelin et al.; OPTICS EXPRESS; 11 October 1999/Vol. 5, No. 8, pp. 169-175
19.		Coherent quantum control of two-photon transitions by a femtosecond laser pulse; Doron Meshulach et al.; NATURE/Vol 396/19 November 1998, pp. 239-242
20.		Selective Bond Dissociation and Rearrangement with Optimally Tailored, Strong-Field Laser Pulses; Robert J. Levis et al.; SCIENCE, Vol. 292 (27 April 2001) pp. 709-713
21.		Femtosecond pulse shaping with a stratified diffractive structure; Frank Schreier et al.; Optics Communications 185 (2000) pp. 227-231
22.		Nonlinear limits to the information capacity of optical fibre communications; Partha P. Mitra et al.; NATURE/Vol 411/28 June 2001, pp. 1027-1030
23.		In vivo ultrahigh-resolution optical coherence tomography; W. Drexler et al.; Optics Letters; Vol. 24, No. 17 (September 1, 1999) pp. 1221-1223
24.		Mass spectrometry; McGraw-Hill Encyclopedia Of Science & Technology, 6 <sup>th</sup> Ed., pp. 492-502; 1987 (12 pages)
25.		Coherent quantum control of multiphoton transitions by shaped ultrashort optical pulses; Doron Meshulach et al.; PHYSICAL REVIEW A; Volume 60, Number 2 (August 1999); pp. 1287-1292
26.		Nonlinear limits to the information capacity of optical fibre communications; Partha P. Mitra et al.; NATURE/Vol 411/28 June 2001, pp. 1027-1030

Examiner:

Date Considered:

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		6550-000057/CPB	10/628,874
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		M. Dantus et al.	
		FILING DATE	GROUP
Sheet 4 of 5		July 28, 2003	

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)			
Ref. Desig.	Examiner's Initials		
27.		Control of Chemical Reactions by Feedback-Optimized Phase-Shaped Femtosecond Laser Pulses; A. Assion et al.; SCIENCE; Vol 282 (30 October 1998) pp. 919-922	
28.		Multiphoton Intrapulse Interference. 1. Control of Multiphoton Processes in Condensed Phases; Katherine A. Walowicz, Igor Pastirk, Vadim V. Lozovoy, and Marcos Dantus; American Chemical Society, J. Phys. Chem. A; August 2002 (5 pages)	
29.		Measuring ultrashort laser pulses in the time-frequency domain using frequency-resolved optical gating; Rick Trebino et al.; 1997 American Institute Of Physics; Rev. Sci. Instrum. 68 (9), September 1997, pp. 3277-3295	
30.		Ambiguity of Ultrashort Pulses Retrieved From the Intensity Autocorrelation and Power Spectrum Traces; J.-H. Chung et al.; CERIAS Tech Report 2002-01, IEEE Journal on Selected Topics in Quantum Electronics, Vol. 7, No. 4; July/August 2001, pp. 656-666	
31.		Measuring Ultrashort Laser Pulses Just Got A Lot Easier!; Rick Trebino et al.; Optics & Photonics News, pp. 23-25, June 2001	
32.		Coherent control of second harmonic generation using spectrally phase coded femtosecond waveforms; Z. Zheng, et al.; Chemical Physics 267, (2001); pp. 161-171	
33.		Spectral phase correlation of coded femtosecond pulses by second-harmonic generation in thick nonlinear crystals; Z. Zheng et al.; Optics Letters/Vol. 25, No. 13/July 1, 2000, pp. 984-986	
34.		Mass-Correlated Pulsed Extraction: Theoretical Analysis and Implementation With a Linear matrix-Assisted laser Desorption/Ionization Time of Flight Mass Spectrometer; Slava V. Kovtoun et al.; American Society for Mass Spectrometry, (2000); pp. 841-853	
35.		Femtoscond laser mass spectroscopy of ferrocenes: Photochemical stabilization by bridge cyclopentadienyl rings?; M. Clara et al.; International Journal of Mass Spectrometry 203 (2000), pp. 71-81	
36.		GeneticAlgorithm-v4.nb; Marcos Dantus; October 2001 to simulate an adaptive genetic algorithm, pp. 1-7	
37.		Abstract-Laser desorption/ionization mass spectrometry of peptides and proteins with particle suspension matrixes; M. Schurenberg et al.; Analytical Chemistry; 71 (1): 221-229; (Jan. 1, 1999); (1 page)	

Examiner:	Date Considered:
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EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		6550-000057/CPB	10/628,874
<b>PATENT AND TRADEMARK OFFICE</b> <b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary)		APPLICANT	
		M. Dantus et al.	
Sheet 5 of 5		FILING DATE	GROUP
		July 28, 2003	

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
38.		Abstract-Matrix-assisted laser desorption/ionisation, an experience; F. Hillenkamp et al.; International Journal Of Mass Spectrometry; 200 (1-3): 71-77 (Dec. 25, 2000); (1 page)
39.		Abstract-Innovative pulse shaping for high-performance wireless TDMA; B. Natarajan et al.; IEEE Communications Letters; 5 (9): 372-374 (Sep. 2001); (1 page)
40.		Abstract-20-fs pulse shaping with a 512-element phase-only liquid crystal modulator; H. Wang et al.; IEEE Journal Of Selected Topics In Quantum Electronics; 7 (4): 718-727 (Jul-Aug 2001); (1 page)
41.		Abstract-Femtosecond quantum control; T Brixner et al.; Advances In Atomic, Molecular, And Optical Physics, Vol 46; 46: 1-54 (2001); (1 page)
42.		Abstract-Photoselective adaptive femtosecond quantum control in the liquid phase; T Brixner et al.; NATURE; 414 (6859): 57-60 (Nov. 01, 2001); (1 page)
43.		Abstract-Interference effects in femtosecond spectroscopy; G Roberts; Philosophical Transactions Of The Royal Society Of London Series A-Mathematical Physical and Engineering Sciences; 360 (1794): 987-1021 (May 15, 2002); (1 page)
44.		Abstract-Programmable chirp compensation for 6-fs pulse generation with a prism-pair-formed pulse shaper; L. Xu et al.; IEEE Journal Of Quantum Electronics; 36 (8): 893-899 (Aug. 2000); (1 page)
45.		TNM-2 Negative Group Velocity Dispersion Mirrors; <a href="http://www.cvlaser.com/ultra-fast">www.cvlaser.com/ultra-fast</a> ; CVI Laser Corporation; (Jan. 13, 2002); (2 pages)
46.		Photogen-Technology; <a href="http://www.photogen.com/body/tech_body.html">www.photogen.com/body/tech_body.html</a> ; Photogen Technologies, Inc., (Dec. 20, 2001); (19 pages)
47.		International Search Report of PCT/US02/02548 dated 11/28/02, 4 pages

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Attachment to 29-Page 1449 Form Listing 341 Other Documents

Categorization of References

Control of Chemical Reactions: altogether references 200-204, 206-228

Experiments in Control: EC1 (most relevant) references 244-261

Experiments in Control: EC2 (less relevant) references 262-287, 315-329

Experiments in Control: EC3 (least relevant) references 288-314, 330-337

Measurement of Femtosecond Laser Pulses  
and Phase Characterization:

M1 (most relevant) references 1-42

Measurement of Femtosecond Laser Pulses  
and Phase Characterization:

M2 (less relevant) references 43-87, 338, 339

Measurement of Femtosecond Laser Pulses  
and Phase Characterization:

M3 (least relevant) references 141-199, 205, 340

Reviews of Coherent Control: altogether references 229-243, 341

Theory: T1 (most relevant) references 88-98

Theory: T2 (less relevant) references 99-123

Theory: T3 (least relevant) references 124-140

FORM HDP-1449 (Based on Form PTO-1449)		ATTORNEY DOCKET NO.	SERIAL NO.
		6550-000057/COC	10/628,874
<b>PATENT AND TRADEMARK OFFICE</b> <b>INFORMATION DISCLOSURE CITATION</b> (Use several sheets if necessary)		APPLICANT	
Sheet 1 of 29		M. Dantus et al.	
		FILING DATE	GROUP
		July 28, 2003	

<b>OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)</b>		
Ref. Desig.	Examiner's Initials	
1.		Jerome Paye; "How to Measure the Amplitude and Phase of an Ultrashort Light Pulse with an Autocorrelator and a Spectrometer"; IEEE Journal of Quantum Electronics, Vol. 30, No. 11, November 1994; pgs. 2693-2697.
2.		Juan L.A. Chilla et al.; "Direct determination of the amplitude and the phase of femtosecond light pulses"; January 1, 1991; Vol.16, No. 1; Optics Letters; pgs. 39-41.
3.		Daniel J. Kane et al.; "Single-shot measurement of the intensity and phase of an arbitrary ultrashort pulse by using frequency-resolved optical gating"; May 15, 1993, Vol. 18, No. 10 Optics Letters; pgs. 823-825.
4.		Daniel J. Kane et al.; "Single-shot measurement of the intensity and phase of a femtosecond UV laser pulse with frequency-resolved optical gating"; July 15, 1994, Vol. 19, No. 14; Optic Letters; pgs. 1061-1063.
5.		D.S. Kim et al.; "Femtosecond pulse distortion in GaAs quantum wells and its effect on pump-probe or four-wave-mixing experiments"; December 15, 1994; Physical Review B, Vol. 50, No. 24, pgs. 18 240-18 249.
6.		Tracy Sharp Clement et al.; "Single-Shot measurement of the amplitude and phase of ultrashort laser pulses in the violet"; January 1, 1995; Optics Letters, Vol. 20, No. 1; pgs. 70-72.
7.		Bern Kohler et al.; "Phase and intensity characterization of femtosecond pulses from a chirped-pulse amplifier by frequency-resolved optical gating"; March 1, 1995, Vol. 20, No. 5, Optics Letters; pgs. 483-485.
8.		John N. Sweetser et al.; "Transient-grating frequency-resolved optical gating"; April 15, 1997, Vol. 22, No. 8; Optics Letters; pgs. 519-521.
9.		Rick Trebino et al.; "Measuring ultrashort laser pulses in the time-frequency domain using frequency-resolved optical gating"; Rev. Sci. Instrum. 68 (9), September 1997; pgs. 3277-3295.
10.		John M. Dudley et al.; "Complete Characterization of Ultrashort Pulse Sources at 1550 nm"; IEEE Journal of Quantum Electronics, Vol. 35, No. 4; April 1999; pgs. 441-450.
11.		Rick Trebino et al.; "The Dilemma of Ultrashort-Laser-Pulse Intensity and Phase Measurement and Applications"; IEEE Journal of Quantum Electronics, Vol. 35, No. 4, April 1999; pgs. 418-420.

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		APPLICANT	
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		FILING DATE	GROUP
Sheet 2 of 29		July 28, 2003	

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
12.		Robert A. Kaindl et al.; "Generation, shaping, and characterization of intense femtosecond pulses tunable from 3 to 20 $\mu$ m"; J. Opt. Soc. Am. B, Vol. 17, No. 12, December 2000; pgs. 2086-2094.
13.		I.G. Cormack et al.; "Practical measurement of femtosecond optical pulses using time-resolved optical gating"; Optics Communications 194 (July 15, 2001); pgs. 415-424.
14.		Dmitriy Panasenko et al.; "Single-shot sonogram generation for femtosecond laser pulse diagnostics by use of two-photon absorption in a silicon CCD camera"; August 15, 2002, Vol. 27, No. 16; Optics Letters; pgs. 1475-1477.
15.		Andrius Baltuska et al.; "Visible pulse compression to 4 fs by optical parametric amplification and programmable dispersion control"; Optics Letters, Vol. 27, No. 5, March 1, 2002; pgs. 306-308.
16.		Juan L.A. Chilla et al.; "Direct determination of the amplitude and the phase of femtosecond light pulses"; January 1, 1991, Vol. 16, No. 1; Optics Letters; pgs. 39-41.
17.		W.E. White et al.; "Direct measurement of the spectral phase of femtosecond pulses"; April 15, 1995, Vol. 20, No. 8; Optics Letters; pgs. 904-906.
18.		A. Sullivan et al.; "Quantitative investigation of optical phase-measuring techniques for ultrashort pulse lasers"; J. Opt. Soc. Am. B, Vol. 13, No. 9, September 1996; pgs. 1965-1978.
19.		Ellen M. Kosik et al.; "The effects of noise on ultrashort optical pulse measurement using SPIDER"; The Institute of Optics, University of Rochester, Rochester, NY; pgs. 21-23.
20.		T. Baumert et al.; "Femtosecond pulse shaping by an evolutionary algorithm with feedback"; Appl. Phys. B 65 (1997); pgs. 779-782.
21.		D. Meshulach et al.; "Adaptive ultrashort pulse compression and shaping"; Optics Communications 138 (1997); pgs. 345-348.
22.		Andrius Baltuska et al.; "Amplitude and phase characterization of 4.5-fs pulses by frequency-resolved optical gating"; Optics Letters, Vol. 23, No. 18, September 15, 1998; pgs. 1474-1476.

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		FILING DATE	GROUP
		July 28, 2003	

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INFORMATION DISCLOSURE CITATION  
(Use several sheets if necessary)

Sheet 3 of 29

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)			
Ref. Desig.	Examiner's Initials		
23.		L. Gallmann et al.; "Techniques for the characterization of sub-10-fs optical pulses: a comparison"; Appl. Phys. B 70 (Suppl), 2000; pgs. S67-S75.	
24.		M.E. Anderson et al.; "The effects of noise on ultrashort-optical-pulse measurement using SPIDER"; Appl. Phys. B 70 (Suppl.); 2000; pgs. S85-S93.	
25.		T. Brixner et al.; "Feedback-controlled femtosecond pulse shaping"; Appl. Phys. B 70 (Suppl.) 2000; pgs. S119-S124.	
26.		G. Stobrawa et al.; "A new high-resolution femtosecond pulse shaper"; Appl. Phys. B 72 (2001); pgs. 627-630.	
27.		M. Hacker et al.; "Frequency doubling of phase-modulated, ultrashort laser pulses"; Appl. Phys. B 73; (2001); pgs. 273-277.	
28.		J.W. Nicholson et al.; "Noise sensitivity and accuracy of femtosecond pulse retrieval by phase and intensity from correlation and spectrum only (PICASO)"; J. Opt. Soc. Am. B; Vol. 19, No. 2; February 2002; pgs. 330-339.	
29.		Christophe Dorrer et al.; "Precision and consistency criteria in spectral phase interferometry for direct electric-field reconstruction"; J. Opt. Soc. Am. B, Vol. 19, No. 5, May 2002; pgs. 1030-1038.	
30.		Ian A. Walmsley et al.; "Characterization of the electric field of ultrashort optical pulses"; J. Opt. Soc. Am. B, Vol. 13, No. 11; November 1996; pgs. 2453-2463.	
31.		K.C. Chu et al.; "Direct measurement of the spectral phase of femtosecond pulses"; Optics Letters, Vol. 20, No. 8; April 15, 1995; pgs. 904-906.	
32.		H. Rudiger Lange et al.; "Reconstruction of the Time Profile of Femtosecond Laser Pulses Through Cross-Phase Modulation"; IEEE Journal of Selected Topics in Quantum Electronics, Vol. 4, No. 2; March/April 1998; pgs. 295-300.	
33.		C. Iaconis et al.; "Direct Interferometric Techniques for Characterizing Ultrashort Optical Pulses"; IEEE Journal of Selected Topics in Quantum Electronics, Vol. 4, No. 2; March/April 1998; pgs. 285-294.	
34.		Andrew M. Weiner et al.; "Femtosecond Pulse Shaping for Synthesis, Processing and Time-to-Space Conversion of Ultrafast Optical Waveforms"; IEEE Journal of Selected Topics in Quantum Electronics, Vol. 4, No. 2; March/April 1998; pgs. 317-331.	

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Sheet 4 of 29		July 28, 2003	

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)			
Ref. Desig.	Examiner's Initials		
35.		C. Iaconis et al.; "Spectral phase interferometry for direct electric-field reconstruction of ultrashort optical pulses"; Optics Letters, Vol. 23, No. 10, May 15, 1998; pgs. 792-794.	
36.		P. Dietrich et al.; "Determining the absolute carrier phase of a few-cycle laser pulse"; Optics Letters, Vol. 25, No. 1, January 1, 2000; pgs. 16-18.	
37.		D.T. Reid et al.; "Amplitude and phase measurement of mid-infrared femtosecond pulses by using cross-correlation frequency-resolved optical gating"; Optics Letters, Vol. 25, No. 19, October 1, 2000; pgs. 1478-1480.	
38.		K. Michelmann et al.; "Measurement of the Page function of an ultrashort laser pulse"; Optics Communications, October 15, 2001; pgs. 163-170.	
39.		L. Gallmann et al.; "Spatially resolved amplitude and phase characterization of femtosecond optical pulses"; Optics Letters, Vol. 26, No. 2, January 15, 2001; pgs. 96-98.	
40.		Masayuki Kakehata et al.; "Single-shot measurement of carrier-envelope phase changes by spectral interferometry"; Optics Letters, Vol. 26, No. 18, September 15, 2001; pgs. 1436-1438.	
41.		J.P. Geindre et al.; "Single-shot spectral interferometry with chirped pulses"; Optics Letters, Vol. 26, No. 20, October 15, 2001; pgs. 1612-1614.	
42.		C. Dorrer et al.; "Direct space-time characterization of the electric fields of ultrashort optical pulses"; Optics Letters, Vol. 27, No. 7, April 1, 2002; pgs. 548-550.	
43.		Greg Taft et al.; "Measurement of 10-fs Laser Pulses"; IEEE Journal of Selected Topics in Quantum Electronics, Vol. 2, No. 3, September 1996; pgs. 575-585.	
44.		Daniel J. Kane et al.; "Simultaneous measurement of two ultrashort laser pulses from a single spectrogram in a single shot"; Optical Society of America; Vol. 14, No. 4, April 1997; pgs. 935-943.	
45.		Peter J. Delfyett et al.; "Joint Time-Frequency Measurements of Mode-Locked Semiconductor Diode Lasers and Dynamics Using Frequency-Resolved Optical Gating"; IEEE Journal of Quantum Electronics, Vol. 35, No. 4, April 1999; pgs. 487-500.	
46.		David N. Fittinghoff et al.; "Frequency-Resolved Optical Gating Measurement of Ultrashort Pulses Passing Through a High Numerical Aperture Objective"; IEEE Journal of Quantum Electronics, Vol. 35, No. 4, April 1999; pgs. 479-486.	

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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(Use several sheets if necessary)

Sheet 5 of 29

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
47.		Andrius Baltuska et al.; "Second-Harmonic Generation Frequency-Resolved Optical Gating in the Single-Cycle Regime"; IEEE Journal of Quantum Electronics, Vol. 35, No. 4, April 1999; pgs. 459-478.
48.		Hilary K. Eaton et al.; "Investigating Nonlinear Femtosecond Pulse Propagation with Frequency-Resolved Optical Gating"; IEEE Journal of Quantum Electronics, Vol. 35, No. 4, April 1999; pgs. 451-458.
49.		Craig W. Siders et al.; "Multipulse Interferometric Frequency-Resolved Optical Gating"; IEEE Journal of Quantum Electronics, Vol. 35, No. 4, April 1999; pgs. 432-440.
50.		Derryck T. Reid; "Algorithm for Complete and Rapid Retrieval of Ultrashort Pulse Amplitude and Phase from a Sonogram"; IEEE Journal of Quantum Electronics; Vol. 35, No. 11, November 1999; pgs. 1584-1589.
51.		M.R. Fetterman et al.; "Propagation of Complex Laser Pulses in Optically Dense Media"; The American Physical Society, Physical Review Letters, Vol. 82, No. 20, May 17, 1999; pgs. 3984-3987.
52.		Atsushi Yabushita et al.; "SHG FROG and XFROG methods for phase/intensity characterization of pulses propagated through an absorptive optical medium"; Optics Communications; October 15, 2001; pgs. 227-232.
53.		Roger G.M.P. Koumans et al.; "Time-Resolved Optical Gating Based on Dispersive Propagation: A New Method to Characterize Optical Pulses"; IEEE Journal of Quantum Electronics, Vol. 36, No. 2, February 2000; pgs. 137-144.
54.		Daniel J. Kane et al.; "Convergence test for inversion of frequency-resolved optical gating spectrograms"; Optics Letters, Vol. 25, No. 16, August 15, 2000; pgs. 1216-1218.
55.		I.G. Cormack et al.; "Rapid measurement of ultrashort-pulse amplitude and phase from a two-photon absorption sonogram trace"; J. Opt. Soc. Am. B; Vol. 18, No. 9, September 2001; pgs. 1377-1382.
56.		Julie A. Gruetzmacher et al.; "Time and frequency-gated FID: a new approach to study the vibrational dephasing of water"; pgs. 530-532.

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		FILING DATE	GROUP
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OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)			
Ref. Desig.	Examiner's Initials		
57.		Juan L.A. Chilla et al.; "Analysis of a Method of Phase Measurement of Ultrashort Pulses in the Frequency Domain"; IEEE Journal of Quantum Electronics, Vol. 27, No. 5, May 1991; pgs. 1228-1235.	
58.		David N. Fittinghoff et al.; "Noise sensitivity in frequency-resolved optical-gating measurements of ultrashort pulses"; J. Opt. Soc. Am. B, Vol. 12, No. 10, October 1995; pgs. 1955-1967.	
59.		Noriaki Tsurumachi et al.; "Interferometric observation of femtosecond free induction decay"; Optics Letters, Vol. 19, No. 22, November 15, 1994; pgs. 1867-1869.	
60.		D. Yelin et al.; "Adaptive femtosecond pulse compression"; Optics Letters, Vol. 22, No. 23, December 1, 1997; pgs. 1793-1795.	
61.		Gregory D. Goodno et al.; "Ultrafast heterodyne-detected transient-grating spectroscopy using diffractive optics"; Optical Society of America, Vol. 15, No. 6, June 1998; pgs. 1791-1794.	
62.		A.V. Sokolov; "Subfemtosecond compression of periodic laser pulses"; Optics Letters, Vol. 24, No. 17, September 1, 1999; pgs. 1248-1250.	
63.		H.S. Eisenberg et al.; "Phase Defects in Self-Focusing of Ultrashort Pulses"; Physical Review Letters, Vol. 83, No. 3, July 19, 1999; pgs. 540-543.	
64.		C. Dorrer et al.; "Characterization of chirped-pulse amplification systems with spectral phase interferometry for direct electric-field reconstruction"; Applied Physics B 70 (Suppl.), 2000; pgs. S77-S84.	
65.		C. Radzewicz et al.; "A poor man's FROG"; Optics Communications, December 15, 2000; pgs. 329-333.	
66.		M. Hacker et al.; "Iterative Fourier transform algorithm for phase-only pulse shaping"; Optics Express, Vol. 9, No. 4, August 13, 2001; pgs. 191-199.	
67.		L. Misoguti et al.; "Generation of Broadband VUV Light Using Third-Order Cascaded Processes"; Physical Review Letters, Vol. 87, No. 1, July 2, 2001; pgs. 013601-1-013601-4.	

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	FILING DATE	GROUP
	July 28, 2003	

**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)**

Ref. Desig.	Examiner's Initials	
68.		Dong Gun Lee et al.; "Coherent Control of High-Order Harmonics with Chirped Femtosecond Laser Pulses"; Physical Review Letters, Vol. 87, No. 24, December 10, 2001; pgs. 243902-1-243902-4.
69.		D. Zeidler et al.; "Amplification of tailored white-light continuum"; Applied Physics, B74 (Suppl.), 2002; pgs. S51-S56.
70.		M. Armstrong et al.; "Versatile seven-femtosecond pulse compressor of parametrically amplified pulses using adaptive optics: studies of the primary events in protein dynamics"; Applied Physics B 74 (Suppl.), 2002; pgs. S127-S132.
71.		T. Brixner et al.; "Generation and characterization of polarization-shaped femtosecond laser pulses"; Applied Physics B74 (Suppl); 2002; pgs. S133-S144
72.		D.M. Villeneuve et al.; "Using frequency-domain manipulation of stretched femtosecond laser pulses to create fast rise and fall times on picosecond pulses"; Applied Physics B74 (Suppl.), 2002; pgs. S157-S161.
73.		C. Dorrer et al.; "Spatio-temporal characterization of the electric field of ultrashort optical pulses using two-dimensional shearing interferometry"; Applied Physics B74 (Suppl.), 2002; pgs. S209-S217.
74.		K.H. Hong et al.; "Time-frequency analysis of chirped femtosecond pulses using Wigner distribution function"; Applied Physics B74 (Suppl), 2002, pgs. S231-S236.
75.		Christophe Dorrer et al.; "Accuracy criterion for ultrashort pulse characterization techniques: application to spectral phase interferometry for direct electric field reconstruction"; Appl. Phys. B 74, Vol. 19, No. 5, May 2002; pgs. 1019-1029.
76.		Dai-Sik Kim et al.; "Femtosecond-pulse distortion in quantum wells"; Appl. Phys B 74, Vol. 48. No. 24; December 15, 1993; pgs. 17902-17905.
77.		E. Tokunaga et al.; "Frequency-domain interferometer for femtosecond time-resolved phase spectroscopy"; Optics Letters, Vol. 17, No. 16; August 15, 1992; pgs. 1131-1133.
78.		Kazunori Naganuma et al; "General Method for Ultrashort Light Pulse Chirp Measurement"; IEEE Journal of Quantum Electronics, Vol. 25, No. 5; June 1989; pgs. 1225-1233.
79.		Victor Wong et al.; "Analysis of ultrashort pulse-shape measurement using linear interferometers"; Optics Letters, Vol. 19, No. 4; February 15, 1994; pgs. 287-289.

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Sheet 8 of 29			

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)			
Ref. Desig.	Examiner's Initials		
80.		D.S. Chemla et al; "Ultrafast phase dynamics of coherent emission from excitons in GaAs quantum wells"; Physical Review B, Vol. 50, No. 12; September 15, 1994; pgs. 8439-8453.	
81.		Victor Wong et al.; "Linear filter analysis of methods for ultrashort-pulse-shape measurements"; J. Opt.Soc. Am. B, Vol. 12, No. 8; August 1995; pgs. 1491-1499.	
82.		Y. Ding et al.; "Time-Domain Image Processing Using Dynamic Holography"; IEEE Journal of Selected Topics in Quantum Electronics, Vol. 4, No. 2; March/April 1998; pgs. 332-341.	
83.		Jerome Tignon et al.; "Spectral Interferometry of Semiconductor Nanostructures"; IEEE Journal of Quantum Electronics, Vol. 35, No. 4; April 1999; pgs. 510-522.	
84.		Arthur L. Smirl et al.; "Heavy-Hole and Light-Hole Quantum Beats in the Polarization State of Coherent Emission from Quantum Wells"; IEEE Journal of Quantum Electronics, Vol. 35, No. 4; April 1999; pgs. 523-531.	
85.		Chris Iaconis et al; "Self-Referencing Spectral Interferometry for Measuring Ultrashort Optical Pulses"; IEEE Journal of Quantum Electronics, Vol. 35, No. 4; April 1999; pgs. 501-509.	
86.		Jung-Ho Chung et al.; "Ambiguity of Ultrashort Pulse Shapes Retrieved From the Intensity Autocorrelation and the Power Spectrum"; IEEE Journal on Selected Topics of Quantum Electronics, Vol. 7, No. 4; July/August 2001; pgs. 656-666.	
87.		John D. Hybl et al; "Two-dimensional Fourier transform electronic spectroscopy"; Journal of Chemical Physics, Vol. 115, No. 14; October 8, 2001; pgs. 6606-6622.	
88.		Anthony P. Peirce et al.; "Optimal control of quantum-mechanical systems: Existence, numerical approximation and applications"; Physical Review A, Vol. 37, No. 12; June 15, 1988; pgs. 4950-4964.	
89.		Richard S. Judson et al.; "Teaching Lasers to Control Molecules"; Physical Review Letters, Vol. 68, No. 10; March 9, 1992; pgs. 1500-1503.	
90.		Michael Messina et al.; "Quantum control of multidimensional systems: Implementation within the time-dependent Hartree approximation"; J. Chem Phys. 104; January 1996; pgs. 173-182.	
91.		D.H. Schirrmeyer et al; "Femtosecond pulse dependence of dissipation in molecular systems"; Chemical Physics Letters December 4, 1998; pgs. 383-390.	

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		July 28, 2003	

<b>OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)</b>			
Ref. Desig.	Examiner's Initials		
92.		Herschel Rabitz et al.; "Optimal Control of Molecular Motion: Design, Implementation and Inversion"; Acc. Chem. Res., Vol. 33, No. 8; 2000; pgs. 572-578.	
93.		R. deVivie-Riedle et al.; "Design and interpretation of laser pulses for the control of quantum systems"; Applied Physics B; 2000; pgs. 285-292.	
94.		J.M. Geremia et al.; "Incorporating physical implementation concerns into closed loop quantum control experiments"; Journal of Chemical Physics, Vol. 113, No. 24; December 22, 2000; pgs. 10841-10848.	
95.		Thomas Hornung et al.; "Adapting optimal control theory and using learning loops to provide experimentally feasible shaping mask patterns"; Journal of Chemical Physics, Vol. 115, No. 7; August 15, 2001; pgs. 3105-3111.	
96.		Moshe Shapiro et al.; "On the Origin of Pulse Shaping Control of Molecular Dynamics"; J. Phys. Chem. A, Vol. 105, No. 105; 2001; pgs. 2897-2902.	
97.		S. Abbas Hosseini et al.; "Coherent control of multiphoton transitions with femtosecond pulse shaping"; Physical Review A, pgs. 033410-1-033410-7.	
98.		Thomas Hornung et al.; "Teaching optimal control theory to distill robust pulses even under experimental constraints"; Physical Review A, Vol. 65; 2002; pgs. 021403-1-021403-4.	
99.		Yi Jing Yan et al.; "Electronic dephasing, vibrational relaxation, and solvent friction in molecular nonlinear optical line shapes"; J. Chem. Phys., October 15, 1988; pgs. 5160-5176.	
100.		Y.J. Yan et al.; "Pulse shaping and coherent Raman spectroscopy in condensed phases"; J. Chem. Phys 94 (2); January 15, 1991; pgs. 997-1001.	
101.		Bern Kohler et al.; "Mode-Locking Matter with Light"; J. Phys. Chem 1993, 97; pgs. 12602-12608.	
102.		Jeffrey L. Krause et al.; "Optical control of molecular dynamics: Molecular cannons, reflectrons and wave-packet focusers"; J. Chem. Phys. 99(9); November 1, 1993; pgs. 6562-6578.	
103.		V. Engel et al.; "Two-photon wave-packet interferometry"; J. Chem Phys. 100 (8); April 15, 1994; pgs. 5448-5458.	

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		M. Dantus et al.	
		FILING DATE	GROUP
		July 28, 2003	
Sheet 10 of 29			

**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)**

Ref. Desig.	Examiner's Initials	
104.		David M. Jonas et al.; "Femtosecond Wavepacket Spectroscopy: Influence of Temperature, Wavelength and Pulse Duration"; J. Phys. Chem.; 1995; pgs. 2594-2608.
105.		Jeffrey L. Krause et al.; "Quantum Control of Molecular Dynamics: The Strong Response Regime"; J. Phys. Chem; 1995, 99; pgs. 13736-13747.
106.		Jianwei Che et al.; "Detection and Control of Molecular Quantum Dynamics"; J. Phys. Chem.; 1995; pgs. 14949-14958.
107.		M. Sterling et al.; "Interrogation and control of condensed phase chemical dynamics with linearly chirped pulses: I <sub>2</sub> in solid Kr"; J. Chem. Phys. 104; May 1, 1996; pgs. 6497-6506.
108.		Jianwei Che et al.; "Semiclassical Dynamics and Quantum Control in Condensed Phases: Application to I <sub>2</sub> in a Solid Argon Matrix"; J. Phys. Chem. 1996, 100; pgs. 7873-7883.
109.		Jianshu Cao et al.; "A simple physical picture for quantum control of wave packet localization"; J. Chem Phys., 107; August 1, 1997; pgs. 1441-1450.
110.		Jianshu Cao et al.; "Intrapulse Dynamical Effects in Multiphoton Processes: Theoretical Analysis"; J. Phys. Chem. A; Vol. 102, 1998; pgs. 4284-4290.
111.		Kenji Mishima et al.; "A theoretical study on laser control of a molecular nonadiabatic process by ultrashort chirped laser pulses"; Journal of Chemical Physics, Vol. 109., No. 5; August 1, 1998; pgs. 1801-1809.
112.		Amichay Vardi et al.; "Laser catalysis with pulses"; Physical Review A, Vol. 58, No. 2; August 1998; pgs. 1352-1360.
113.		H.A. Kim et al.; "Expanded concept of the adiabatic population transfer using dressed states"; Physical Review A, Vol. 59, No. 2; February 1999; pgs. 1404-1407.
114.		Jianshu Cao et al.; "Molecular pie pulses: Population inversion with positively chirped short pulses"; Journal of Chemical Physics, Vol. 113, No. 5; August 1, 2000; pgs. 1898-1909.
115.		A.J. Wurzer et al.; "Highly localized vibronic wavepackets in large reactive molecules"; Appl. Phys. B 71, 2000; pgs. 405-409.
116.		F. Legare et al.; "Laser pulse control of Raman processes by chirped non-adiabatic passage"; Journal of Raman Spectroscopy; 2000; pgs. 15-23.

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)			
Ref. Desig.	Examiner's Initials		
117.		Moshe Shapiro et al.; "Coherently Controlled Asymmetric Synthesis with Achiral Light"; Physical Review Letters, Vol. 84, No. 8; February 21, 2000; pgs. 1669-1672.	
118.		Gabriel Turinici et al.; "Quantum wavefunction controllability"; Chemical Physics 267; 2001; pgs. 1-9.	
119.		M. Gruebele; "Fully quantum coherent control"; Chemical Physics 267; 2001; pgs. 33-46.	
120.		V.S. Malinovsky et al.; "General theory of population transfer by adiabatic rapid passage with intense, chirped laser pulses"; The European Physical Journal D 14; 2001; pgs. 147-155.	
121.		Z.W. Shen et al.; "Selective preparation of ground state wave-packets: a theoretical analysis of femtosecond pump-dump-probe experiments on the potassium dimer"; The European Physical Journal D 14; 2001; pgs. 167-172.	
122.		Sanislav S. Bychkov et al.; "Laser coherent control of molecular chiral states via entanglement of the rotational and torsional degrees of freedom"; Journal of Raman Spectroscopy; 2002; pgs. 962-973.	
123.		S.E. Harris; "Control of Feshbach resonances by quantum interference"; Physical Review A66; 2002; pgs. 010701-1-010701-4.	
124.		John M. Jean et al.; "Application of a multilevel Redfield theory to electron transfer in condensed phases"; J. Chem. Phys. 96; April 15, 1992; pgs. 5827-5842.	
125.		Bjarne Amstrup et al.; "Control of HOD photodissociation dynamics via bond-selective infrared multiphoton excitation and a femtosecond ultraviolet laser pulse"; J. Chem. Phys., Vol. 97, No. 11; December 1, 1992; pgs. 8285-8295.	
126.		L.D. Ziegler et al.; "Nonlinear polarization description of phase-locked pulse-pair spectroscopy"; J. Chem. Phys., Vol. 97, No. 7; October 1, 1992; pgs. 4704-4713.	
127.		D. Lalovic et al.; "Quantum mechanics in terms of non-negative smoothed Wigner functions"; Physical Review A, Vol. 46, No. 3; August 1, 1992; pgs. 1206-1212.	
128.		S. Meyer et al.; "Photoelectron distributions from femtosecond pump/probe excitation with chirped probe pulses"; Journal of Chemical Physics, Vol. 108, No. 18; pgs. 7631-7636.	

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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July 28, 2003	

**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)**

Ref. Desig.	Examiner's Initials	
129.		V.M. Akulin et al.; "Laser Control of Atomic Motion inside Diatomic Molecules"; J. Phys. Chem. A, Vol. 102, No. 23; 1998; pgs. 4310-4320.
130.		Jeffrey L. Krause et al.; "Creating and Detecting Shaped Rydberg Wave Packets"; Physical Review Letters, Vol. 79, No. 25; December 22, 1997; pgs. 4978-4981.
131.		Jianshu Cao et al.; "Molecular Pi PULSE for Total Inversion of Electronic State Population"; Physical Review Letters, Vol. 80, No. 7; February 16, 1998; pgs. 1406-1409.
132.		Christopher J. Bardeen et al.; "Using time-dependent rate equations to describe chirped pulse excitation in condensed phases"; Chemical Physics Letters 302; 1999; pgs. 405-410.
133.		Moshe Shapiro et al.; "Nonadiabatic wave packet dynamics: Experiment and theory in IBr"; Journal of Chemical Physics, Vol. 110, No. 5; February 1, 1999; pgs. 2465-2473.
134.		Zhenwen Shen et al.; "Pump-dump control and the related transient absorption spectroscopies"; Journal of Chemical Physics, Vol. 110, No. 15; April 15, 1999; pgs. 7192-7201.
135.		Kenji Mishima et al.; "Theoretical study on quantum control of photodissociation and photodesorption dynamics by femtosecond chirped laser pulses"; Journal of Chemical Physics, Vol. 110, No. 16; April 22, 1999; pgs. 7756-7769.
136.		Yu-Chen Shen et al.; "What can short-pulse pump-probe spectroscopy tell us about Franck-Condon dynamics?"; Journal of Chemical Physics, Vol. 110, No. 20; May 22, 1999; pgs. 9793-9806.
137.		H.S. Moon et al.; "Coherence control using the ratio of Rabi frequencies for complete coherent inversion in a four-level system"; J. Phys. B At. Mol. Phys. Vol. 32; 1999; pgs. 987-999.
138.		Jeffrey A. Cina; "Nonlinear wavepacket interferometry for polyatomic molecules"; Journal of Chemical Physics, Vol. 113, No. 21; December 1, 2000; pgs. 9488-9496.
139.		M. Ovchinnikov et al.; "Semiclassical molecular dynamics computation of spontaneous light emission in the condensed phase: Resonance Raman spectra"; Journal of Chemical Physics, Vol. 114, No. 16; April 22, 2001; pgs. 7130-7143.
140.		F. Gel'mukhanov et al.; "Dynamics of two-photon absorption by molecules and solutions"; J. Opt. Soc. Am. B, Vol. 19, No. 5; May 2002; pgs. 937-945.

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM HDP-1449 (Based on Form PTO-1449)		ATTORNEY DOCKET NO.	SERIAL NO.
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Sheet 13 of 29		July 28, 2003	

**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)**

Ref. Desig.	Examiner's Initials	
141.		V. Kabelka et al.; "Time-frequency imaging of a single ultrashort light pulse from anularly resolved autocorrelation"; Optics Letters, Vol. 20, No.1; June 1, 1995; pgs. 1301-1303.
142.		Paul R. Bolton et al.; "Propagation of intense, ultrashort laser pulses through metal vapor: refraction-limited behavior for single pulses"; J. Opt. Soc. Am. B, Vol. 13, No. 2; February 1996; pgs. 336-346.
143.		June-Koo Rhee et al.; "Real-time dispersion analyzer of femtosecond laser pulses with use of a spectrally and temporally resolved upconversion technique"; J. Opt. Soc. Am. B, Vol. 13, No. 8; August 1996; pgs. 1780-1785.
144.		Marco A. Krumbiegel et al.; "Direct ultrashort-pulse intensity and phase retrieval by frequency-resolved optical gating and a computational neural network"; Optics Letters, Vol. 21, No. 2; January 15, 1996; pgs. 143-145.
145.		S. Backus et al.; "16-fs, 1- $\mu$ J ultraviolet pulses generated by third-harmonic conversion in air"; Optics Letters, Vol. 21, No. 9; May 1, 1996; pgs. 665-667.
146.		C. Iaconis et al.; "Direct measurement of the two-point field correlation function"; Optics Letters, Vol. 21, No. 21; November 1, 1996; pgs. 1783-1785.
147.		David N. Fittinghoff et al.; "Measurement of the intensity and phase of ultraweak, ultrashort laser pulses"; Optics Letters, Vol. 21, No. 12; June 15, 1996; pgs. 884-886.
148.		T. Feurer et al.; "Measuring the temporal intensity of ultrashort laser pulses by triple correlation"; Appl. Phys. B; 1998; pgs. 163-168.
149.		Alfred Kwok et al.; "Frequency-Resolved Optical Gating Using Cascaded Second-Order Nonlinearities"; Journal of Selected Topics in Quantum Electronics, Vol. 4, No. 2; March/April 1998; pgs. 271-277.
150.		Daniel J. Kane; "Real-Time Measurement of Ultrashort Laser Pulse Using Principal Component Generalized Projection"; IEEE Journal of Selected Topics in Quantum Electronics; Vol. 4, No. 2; March/April 1998; pgs. 278-284.
151.		Scott A. Diddams et al.; "Characterizing the Nonlinear Propagation of Femtosecond Pulses in Bulk Media"; IEEE Journal of Selected Topics in Quantum Electronics, Vol. 4, No. 2; March/April 1998; pgs. 306-316.

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)			
Ref. Desig.	Examiner's Initials		
152.		Kazuya Takasago et al.; "Evaluation of Femtosecond Pulse Shaping with Low-Loss Phase-Only Masks"; IEEE Journal of Selected Topics in Quantum Electronics, Vol. 4, No. 2; March/April 1998; pgs. 346-352.	
153.		J. Peatross et al.; "Temporal decorrelation of short laser pulses"; J. Opt. Soc. Am. B, Vol. 15, No. 1; January 1998; pgs. 216-222.	
154.		Michael J. Stimson et al.; "Noisy-light correlation functions by frequency resolved optical gating"; J. Opt. Soc. Am. B, Vol. 15, No. 2; February 1998; pgs. 505-514.	
155.		J. W. Nicholson et al.; "Full-field characterization of femtosecond pulses by spectrum and cross-correlation measurements"; Optics Letters, Vol. 24, No. 23; December 1, 1999; pgs. 1774-1776.	
156.		F. Romstad et al.; "Measurement of Pulse Amplitude and Phase Distortion in a Semiconductor Optical Amplifier: from Pulse Compression to Breakup"; IEEE Photonics Technology Letters, Vol. 12, No. 12; December 2000; pgs. 1674-1676.	
157.		Tzu-Ming Liu et al.; "Triple-optical autocorrelation for direct optical pulse-shape measurement"; Applied Physics Letters, Vol. 81, No. 8; August 19, 2002; pgs. 1402-1404.	
158.		Julie A. Gruetzmacher et al.; "Few-cycle mid-infrared pulse generation, characterization and coherent propagation in optically dense media"; Review of Scientific Instruments, Vol. 73, No. 6; June 2002; pgs. 2227-2236.	
159.		A.M. Weiner et al.; "Femtosecond Pulse Sequences Used for Optical Manipulation of Molecular Motion"; Reports; March 16, 1990; pgs. 1317-1319.	
160.		Yoshihiro Takagi et al.; "Multiple- and single-shot autocorrelator based on two-photon conductivity in semiconductors"; Optics Letters, Vol. 17, No. 9; May 1, 1992; pgs. 658-660.	
161.		Thomas J. Dunn et al.; "Experimental Determination of the Dynamics of a Molecular Nuclear Wave Packet via the Spectra of Spontaneous Emission"; Physical Review Letters, Vol. 70, No. 22; May 31, 1993; pgs. 3388-3391.	
162.		M.E. Fermann et al.; "Shaping of ultrashort optical pulses by using an integrated acousto-optic tunable filter"; Optics Letters, Vol. 18, No. 18; September 15, 1993; pgs. 1505-1507.	
163.		V.L. da Silva et al.; "Nonlinear pulse shaping and causality"; Optics Letters, Vol. 18, No. 8; April 15, 1993; pgs. 580-582.	

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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July 28, 2003	

**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)**

Ref. Desig.	Examiner's Initials	
164.		T. Brixner et al.; "Feedback-controlled optimization of amplified femtosecond laser pulses"; Applied Physics B 68; 1999; pgs. 281-284.
165.		S. Yeremenko et al.; "The criterion of pulse reconstruction quality based on Wigner representation"; Applied Physics B 70 (Suppl.); 2000; pgs. S109-S117.
166.		A. Efimov et al.; "Minimization of dispersion in an ultrafast chirped pulse amplifier using adaptive learning"; Appl. Phys. B 70 (Suppl.); 2000; pgs. S133-S141.
167.		T. Kobayashi et al.; "Tunable visible and near-infrared pulse generator in a 5 fs regime"; Appl. Phys. B 70 (Suppl.); 2000; pgs. S239-S246.
168.		R. deVivie-Riedle et al.; "Design and interpretation of laser pulses for the control of quantum systems"; Appl. Phys. B 71; 2000; pgs. 285-292.
169.		Ch. Warmuth et al.; "Studying vibrational wavepacket dynamics by measuring fluorescence interference fluctuations"; Journal of Chemical Physics, Vol. 112, No. 11; March 15, 2000; pgs. 5060-5069.
170.		E. Zeek et al.; "Adaptive pulse compression for transform-limited 15-fs high-energy pulse generation"; Optics Letters, Vol. 25, No. 8; April 15, 2000; pgs. 587-589.
171.		A. Apolonski et al.; "Controlling the Phase Evolution of Few-Cycle Light Pulses"; Physical Review Letters, Vol. 85, No. 4; July 24, 2000; pgs. 740-743.
172.		Ch. Warmuth et al.; "Molecular quantum dynamics in a thermal system: fractional wave packet revivals probed by random-phase fluorescence interferometry"; Journal of Chemical Physics, Vol. 114, No. 22; June 8, 2001; pgs. 9901-9910.
173.		A.N. Naumov et al.; "Frequency-time and time-space mappings for single-shot coherent four-wave mixing with chirped pulses and broad beams"; Journal of Raman Spectroscopy, 2001; pgs. 960-970.
174.		G.G. Paulus et al.; "Absolute-phase phenomena in photoionization with few-cycle laser pulses"; Nature, Vol. 414; November 8, 2001; pgs. 182-184.
175.		Yaron Silberberg; "Physics at the attosecond frontier"; Nature, Vol. 414, November 29, 2001; pgs. 494-495.

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM HDP-1449 (Based on Form PTO-1449)		ATTORNEY DOCKET NO.	SERIAL NO.
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<b>OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)</b>			
Ref. Desig.	Examiner's Initials		
176.		M. Hentschel et al.; "Attosecond metrology"; Nature, Vol. 414; November 29, 2001; pgs. 509-513.	
177.		K. Michelmann et al.; "Measurement of the Page function of an ultrashort laser pulse"; Optics Communications; October 15, 2001; pgs. 163-170	
178.		L. Lepetit et al.; "Linear techniques of phase measurement by femtosecond spectral interferometry for applications in spectroscopy"; J. Opt. Soc. Am. B, Vol. 12, No. 12; December 1995; pgs. 2467-2474.	
179.		E.T.J. Nibbering et al.; "Spectral determination of the amplitude and the phase of intense ultrashort optical pulses"; J. Opt. Soc. Am. B, Vol. 13, No. 2; February 1996; pgs. 317-329.	
180.		L. Lepetit et al.; "Two-dimensional nonlinear optics using Fourier-transform spectral interferometry"; Optics Letters, Vol. 21, No. 8; April 15, 1996; pgs. 564-566.	
181.		K.C. Chu et al.; "Temporal interferometric measurement of femtosecond spectral phase"; Optics Letters, Vol. 21, No. 22; November 15, 1996; pgs. 1842-1844.	
182.		Victor Wong et al.; "Ultrashort-pulse characterization from dynamic spectrograms by iterative phase retrieval"; J. Opt. Soc. Am. B, Vol. 14, No. 4; April 1997; pgs. 944-949.	
183.		W.J. Walecki et al.; "Characterization of the polarization state of weak ultrashort coherent signals by dual-channel spectral interferometry"; Optics Letters, Vol. 22, No. 2; January 15, 1997; pgs. 81-83.	
184.		J.P. Likforman et al.; "Measurement of photon echoes by use of femtosecond Fourier-transform" Spectral Interferometry; Optics Letters, Vol. 22, No. 14; July 15, 1997; pgs. 1104-1106.	
185.		Michel F. Emde et al.; "Spectral interferometry as an alternative to time-domain heterodyning"; Optics Letters, Vol. 22, No. 17; September 1, 1997; pgs. 1338-1340.	
186.		X. Chen et al.; "Temporally and spectrally resolved amplitude and phase of coherent four-wave-mixing emission from GaAs quantum wells"; Physical Review B, Vol. 56, No. 15; October 15, 1997; pgs. 9738-9743.	
187.		Christophe Dorrer et al.; "Phase Amplitude Coupling in Spectral Phase Modulation"; IEEE Journal of Selected Topics in Quantum Electronics, Vol. 4, No. 2; March/April 1998; pgs. 342-345.	

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM HDP-1449 (Based on Form PTO-1449)		ATTORNEY DOCKET NO.	SERIAL NO.
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OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)			
Ref. Desig.	Examiner's Initials		
188.		Sarah M. Gallagher et al.; "Heterodyne detection of the complete electric field of femtosecond four-wave mixing signals"; J. Opt. Soc. Am. B, Vol. 15, No. 8; August 1998; pgs. 2338-2345.	
189.		Christophe Dorrer; "Influence of the calibration of the detector on spectral interferometry"; J. Opt. Soc. Am. B; Vol. 16, No. 7; July 1999; pgs. 1160-1168.	
190.		Allison W. Albrecht et al.; "Experimental distinction between phase shifts and time delays: Implications for femtosecond spectroscopy and coherent control of chemical reactions"; Journal of Chemical Physics, Vol. 111, No. 24; December 22, 1999; pgs. 10934-10955.	
191.		C. Dorrer et al.; "Single-shot real-time characterization of chirped-pulse amplification systems by spectral phase interferometry for direct electric-field reconstruction"; Optics Letters, Vol. 24, No. 22; November 15, 1999; pgs. 1644-1646.	
192.		C. Dorrer; "Implementation of spectral phase interferometry for direct electric-field reconstruction with a simultaneously recorded reference interferogram"; Optics Letters, Vol. 24, No. 21; November 1, 1999; pgs. 1532-1534.	
193.		Christophe Dorrer et al.; "Spectral resolution and sampling issues in Fourier-transform spectral interferometry"; J. Opt. Soc. Am. B, Vol. 17, No. 10; October 2000; pgs. 1795-1802.	
194.		C.Y. Chien et al.; "Single-shot chirped-pulse spectral interferometry used to measure the femtosecond ionization dynamics of air"; Optics Letters, Vol. 25, No. 8; April 15, 2000; pgs. 578-580.	
195.		J.W. Nicholson et al.; "Unbalanced third-order correlations for full characterization of femtosecond pulses"; Optics Letters, Vol. 25, No. 24; December 15, 2000; pgs. 1801-1803.	
196.		A. Apolonski et al.; "Controlling the Phase Evolution of Few-Cycle Light Pulses"; Physical Review Letters, Vo. 85, No. 4; July 24, 2000; pgs. 740-743.	
197.		David J. Jones et al.; "Carrier-Envelope Phase Control of Femtosecond Mode-Locked Lasers and Direct Optical Frequency Synthesis"; SCIENCE magazine, Vol. 288; April 28, 2000; pgs. 635-639.	
198.		A. Poppe et al; "Few-cycle optical waveform synthesis"; Applied Physics B 72; 2001; pgs. 373-376.	

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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July 28, 2003	

**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)**

Ref. Desig.	Examiner's Initials	
199.		Allison Albrecht Ferro et al.; "Complete femtosecond linear free induction decay, Fourier algorithm for dispersion relations and accuracy of the rotating wave approximation"; Journal of Chemical Physics, Vol. 114, No. 10; March 8, 2001; pgs. 4649-4656.
200.		Chantal Daniel et al.; "Deciphering the Reaction Dynamics Underlying Optimal Control Laser Fields"; Science Magazine, Vol. 299; January 24, 2003; pgs. 536-539.
201.		T. Witte et al.; "Controlling molecular ground-state dissociation by optimizing vibrational ladder climbing"; Journal of Chemical Physics, Vol. 118, No. 5; February 1, 2003; pgs. 2021-2024.
202.		R.J. Levis et al.; "Closing the Loop on Bond Selective Chemistry Using Tailored Strong Field Laser Pulses"; The Journal of Physical Chemistry, Vol. 106, No. 27; July 11, 2002; pgs 6427-6444.
203.		Mustafa Demirplak et al.; "Optical control of molecular dynamics in a liquid"; Journal of Chemical Physics, Vol. 116, No. 18; May 8, 2002; pgs. 8028-8035.
204.		M. Bergt et al.; "Time-resolved organometallic photochemistry Femtosecond fragmentation and adaptive control of CpFe(CO) <sub>2</sub> X (X=C1,Br,1)"; Journal of Organometallic Chemistry 661; 2002; pgs. 199-209.
205.		Ben R. Torralva et al; "Mechanisms for laser control of chemical reactions"; Journal of Modern Optics, Vol. 49, No. 3/4; 2002; pgs. 593-625.
206.		N.H. Damrauer et al.; "Control of bond-selective photochemistry in CH <sub>2</sub> BrCl using adaptive femtosecond pulse shaping"; The European Physical Journal D, 20, 2002; pgs. 71-76.
207.		L. Windhorn et al.; "Molecular dissociation by mid-IR femtosecond pulses"; Chemical Physics Letters 357, May 3, 2002; pgs. 85-90.
208.		Robert J. Levis et al.; "Selective Bond Dissociation and Rearrangement with Optimally Tailored, Strong-Field Laser Pulses"; Science Magazine, Vol. 292; April 27, 2001; pgs. 709-713.
209.		T. Brixner et al.; "Problem complexity in femtosecond quantum control"; Chemical Physics 267; 2001; pgs. 241-246.
210.		O.M. Sarkisov et al.; "Control of elementary chemical reactions by femtosecond light pulses"; Quantum Electronics, Vol. 31, No. 6; 2001; pgs.483-488.

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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FILING DATE	GROUP
July 28, 2003	

**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)**

Ref. Desig.	Examiner's Initials	
211.		Julie A. Mueller et al.; "Competing isomeric product channels in the 193 nm photodissociation of 2-chloropropene and in the unimolecular dissociation of the 2-propenyl radical"; Journal of Chemical Physics, Vol. 114, No. 10; March 8, 2001; pgs. 4505-4521.
212.		Chantal Daniel et al.; "Analysis and control of laser induced fragmentation processes in CpMn(CO) <sub>3</sub> "; Chemical Physics 267; 2001; pgs. 247-260.
213.		A. Glass et al.; "Control of the photodissociation of CsCl"; Applied Physics B 71; 2000; pgs. 267-276.
214.		T. Frohnmyer et al.; "Femtosecond pump-probe photoelectron spectroscopy on Na <sub>2</sub> : a tool to study basic coherent control schemes"; Applied Physics B 71; 2000; pgs. 259-266.
215.		M. Bergt et al.; "Controlling the Femtochemistry of Fe(CO) <sub>5</sub> "; J. Phys. Chem. A, Vol. 103, No. 49; 1999; pgs. 10381-10387.
216.		A. Assion et al.; "Control of Chemical Reactions by Feedback-Optimized Phase-shaped Femtosecond Laser Pulses"; Science Magazine, Vol. 282; October 30, 1998; pgs. 919-922.
217.		A. Assion et al.; "Coherent control by a single phase shaped femtosecond laser pulse"; Chemical Physics Letters 259; September 13, 1996; pgs. 488-494.
218.		Langchi Zhu et al.; "coherent Laser Control of the Product Distribution Obtained in the Photoexcitation of HI"; Science Magazine, Vol. 270; October 6, 1995; pgs. 77-80.
219.		Yu-hui Chiu et al.; "Vibrational mode effects, scattering dynamics and energy disposal in reaction of C <sub>2</sub> H <sub>2</sub> with methane"; J. Chem. Phys., Vol. 102, No. 3; January 15, 1995; pgs. 1199-1216.
220.		J.S. Keller et al.; "Selective bond fission in methyl mercaptan at 193 nm via radial derivative coupling between the 2 <sup>1</sup> A" and 1 <sup>1</sup> A" adiabatic electronic states"; J. Chem. Phys. Vol. 96, No. 6; March 15, 1992; pgs. 4324-4329.
221.		I. Bar et al.; "Mode-selective bond fission: Comparison between the photodissociation of HOD (0,0,1) and HOD (1,0,0)"; J. Chem. Phys. Vol. 95, No. 5; September 1, 1991; pgs. 3341-3346.
222.		Michael J. Bronikowski et al.; "Bond-specific chemistry: OD:OH product ratios for the reactions H+HOD(100) and H+HOD(001)"; J. Chem. Phys., Vol. 95, No. 11; December 1, 1991; pgs. 8647-8648.

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)**

Ref. Desig.	Examiner's Initials	
223.		I. Bar et al.; "Direct observation of preferential bond fission by excitation of a vibrational fundamental: Photodissociation of HOD (0,0,1)"; J. Chem. Phys., Vol. 93, No. 3; August 1, 1990; pgs. 2146-2148.
224.		R.L. VanderWal et al.; "Selectively breaking the O-H bond in HOD"; J. Chem. Phys., Vol. 92, No. 1; January 1, 1990; pgs. 803-805.
225.		Neil Shafer et al.; "Isotope effect in the photodissociation of HDO at 157.5 nm"; J. Chem. Phys., Vol. 90, No. 11; June 1, 1989; pgs. 6807-6808.
226.		L.J. Butler et al.; "The electronic state-selective photodissociation of CH <sub>2</sub> Br at 248, 210 and 193 nm"; J. Chem. Phys. Vol. 86, No. 4; February 15, 1997; pgs. 2051-2074.
227.		L.J. Butler et al.; "Bond selective photochemistry in CH <sub>2</sub> Br through electronic excitation at 210 nm"; J. Chem. Phys., Vol. 84, No. 7; April 1 1986; pgs. 4104-4106.
228.		David J. Tannor et al.; "Control of selectivity of chemical reaction via control of wave packet evolution"; J. Chem. Phys., Vol. 83, No. 10; November 15, 1985; pgs. 5013-5018.
229.		Lutfur R. Khundkar et al.; "Ultrafast Molecular Reaction Dynamics in Real-Time: Progress Over a Decade"; Annu. Rev. Phys. Chem., 1990; pgs. 15-60.
230.		Stuart A. Rice; "Optical control of reactions"; Nature magazine, Vol. 403; February 3, 2000; pgs. 496-497.
231.		Richard N. Zare; "Laser Control of Chemical Reactions"; Science magazine, Vol. 279; March 20, 1998; pgs. 1875-1879.
232.		Stuart A. Rice; "Active Control of Molecular Dynamics: Coherence versus Chaos"; Journal of Statistical Physics, Vol. 101, Nos. 1/2; 2000; pgs. 187-212.
233.		Herschel Rabitz et al.; "Whither the Future of Controlling Quantum Phenomena?"; Science magazine, Vol. 288; May 5, 2000; pgs. 824-828.
234.		Yuri T. Mazurenko; "Spectral Holography and Spectral Nonlinear Optics of Ultrashort Pulses"; Journal of the Chinese Chemical Society, Vol 47, No. 4A; 2000; pgs. 679-582.
235.		Marcos Dantus; "Coherent Nonlinear Spectroscopy: From Femtosecond Dynamics to Control"; Annu. Rev. Phys. Chem. 2001; pgs. 639-679, C1-C7.

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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		July 28, 2003	
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**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)**

Ref. Desig.	Examiner's Initials		
236.		Stuart A. Rice; "Interfering for the good of a chemical reaction"; Nature magazine; Vol. 409; January 18, 2001; pgs. 422-426.	
237.		Wolfgang Kiefer et al.; "Femtosecond time-resolved spectroscopy of elementary molecular dynamics"; Naturwissenschaften; 2002; pgs. 250-258.	
238.		Alois Renn et al.; "Multidimensional Holography by Persistent Spectral Hole Burning"; The Journal of Physical Chemistry A, Vol. 106, No. 13; April 4, 2002; pgs. 3045-3060.	
239.		T.C. Weinacht et al.; "Using feedback for coherent control of quantum systems"; Journal of Optics B: Quantum and Semiclassical Optics; 2002; pgs. R35-R52.	
240.		Niels E. Henriksen; "Laser control of chemical reactions"; 2002; pgs. 37-42. Chem. Soc. Rev. 3137 42.	
241.		Stuart A. Rice et al.; "Active control of product selection in a chemical reaction: a view of the current scene"; Phys. Chem. Chem. Phys.; 2002; pgs. 1683-1700.	
242.		Allen J. Bard et al.; "Holy Grails in Chemistry"; American Chemical Society, Vol. 28, No. 3; March 1995.	
243.		Marcos Dantus; "Ultrafast Probing and Control of Molecular Dynamics: Beyond the Pump-Probe Method"; pgs. 169-188. Kuhn & Weyh SRZ 9/04/2001	
244.		Philip H. Bucksbaum; "Ultrafast control"; Nature magazine, Vol. 421; February 6, 2003; pgs. 593-594. Kuhn & Weyh SR2 9/4/2001	
245.		Christopher J. Bardeen et al.; "Effect of Pulse Shape on the Efficiency of Multiphoton Processes: Implications for Biological Microscopy"; Journal of Biomedical Optics, Vol. 4, No. 3; July 1999; pgs. 362-367.	
246.		Doron Meshulach et al.; "Coherent quantum control of multiphoton transitions by shaped ultrashort optical pulses"; Physical Review A, Vol. 60, No. 2; August 1999; pgs. 1287-1292.	
247.		T. Hornung et al.; "Optimal control of one- and two-photon transitions with shaped femtosecond pulses and feedback"; Applied Physics B 71; 2000; pgs. 277-284.	
248.		T. Brixner et al.; "Photoselective adaptive femtosecond quantum control in the liquid phase"; Nature magazine, Vol. 414; November 2001; pgs. 57-60.	

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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<b>OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)</b>		
Ref. Desig.	Examiner's Initials	
249.		B.J. Pearson et al.; "Coherent control using adaptive learning algorithms"; Physical Review A, Vol. 63; 2001; pgs. 063412-1-063412-12.
250.		D. Zeidler et al.; "Evolutionary algorithms and their application to optimal control studies"; Physical Review A, Vol. 64; 2001; pgs. 023420-1-023420-13.
251.		Jennifer L. Herek et al.; "Quantum control of energy flow in light harvesting"; Nature magazine, Vol. 417; May 30, 2002; pgs. 533-535.
252.		Nirit Dudovich et al.; "Single-pulse coherently controlled nonlinear Raman spectroscopy and microscopy"; Nature magazine, Vol. 418; August 1, 2002; pgs. 512-514.
253.		Dan Oron et al.; "Single-Pulse Phase-Contrast Nonlinear Raman Spectroscopy"; Physical Review Letters, Vol. 89, No. 27; December 30, 2002; pgs. 27300-1-273001-4.
254.		T. Brixner et al.; "Liquid-phase adaptive femtosecond quantum control: Removing intrinsic intensity dependencies"; Journal of Chemical Physics, Vol. 118, No. 8; February 22, 2003; pgs. 3692-3701.
255.		R. Netz et al.; "Observation of Selectivity of Coherent Population Transfer Induced by Optical Interference"; Physical Review Letters, Vol. 90, No. 6; February 14, 2003; pgs. 063001-1-063001-4.
256.		Bern Kohler et al.; "Controlling the Future of Matter"; Acc. Chem. Res., Vol. 28, No. 3; 1995; pgs. 133-140.
257.		D.W. Schumacher et al.; "Physical Review A, Vol. 54, No. 5; November 1996; pgs. 4271-4278. "Phase Dependence of Intense Field Ionization"
258.		Christopher J. Bardeen et al.; "Feedback quantum control of molecular electronic population transfer"; Chemical Physics Letters 280; 1997; pgs. 151-158.
259.		Christopher J. Bardeen et al.; "Quantum Control of NaI Photodissociation Reaction Product States by Ultrafast Tailored Light Pulses"; J. Phys. Chem. A, Vol. 101, No. 20; pgs. 3815-3822. 1997
260.		Christopher J. Bardeen et al.; "Quantum Control of Population Transfer in Green Fluorescent Protein by Using Chirped Femtosecond Pulses"; J. Am. Chem. Soc., Vol. 120, No. 50; 1998; 13023-13027.

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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<b>OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)</b>			
Ref. Desig.	Examiner's Initials		
261.		Doron Meshulach et al.; "Coherent quantum control of two-photon transitions by a femtosecond laser pulse"; Nature magazine, Vol. 396; November 19, 1998; pgs. 239-242.	
262.		Peifang Tian et al.; "Ultrafast measurement of two-photon absorption by loss modulation"; Optics Letters, Vol. 27, No. 18; September 15, 2002; pgs. 1634-1636.	
263.		Sergey Yeremenko et al.; "Frequency-resolved pump-probe characterization of femtosecond infrared pulses"; Optics Letters, Vol. 27, No. 13; July 1, 2002; pgs. 1171-1173.	
264.		Vladimir Kalosha et al.; "Generation of Single Dispersion Precompensated 1-fs Pulses by Shaped-Pulse Optimized High-Order Stimulated Raman Scattering"; Physical Review Letters, Vol. 88, No. 10; March 11, 2002; pgs. 103901-1-103901-4.	
265.		A. Baltuska et al.; "Attosecond control of electronic processes by intense light fields"; Nature magazine, Vol. 421; February 6, 2003; pgs. 611-615.	
266.		T.C. Weinacht et al.; "Controlling the shape of a quantum wavefunction"; Nature magazine, Vol. 397; January 21, 1999; pgs. 233-235.	
267.		Arjan H. Buist et al.; "Probing microscopic chemical environments with high-intensity chirped pulses"; Optics Letters, Vol. 24, No. 4; February 15, 1999; pgs. 244-246.	
268.		D.J. Maas et al.; "Population transfer via adiabatic passage in the rubidium quantum ladder system"; Physical Review A, Vol. 59, No. 2; February 1999; pgs. 1374-1381.	
269.		Zohar Amitay et al.; "Phase-tailoring molecular wave packets to time shift their dynamics"; Chemical Physics 267; 2001; pgs. 141-149.	
270.		T.C. Weinacht et al.; "Coherent learning control of vibrational motion in room temperature molecular gases"; Chemical Physics Letters 344; 2001; pgs. 333-338.	
271.		R. van Leeuwen et al.; "Manipulation of differential electron yields via autoionizing wave-packet control"; Physical Review A, Vol. 63; 2001; pgs. 033403-1-033403-5.	
272.		C. Rangan et al.; "Optimally shaped terahertz pulses for phase retrieval in a Rydberg-atom data register"; Physical Review A, Vol. 64; 2001; pgs. 033417-1-033417-5.	
273.		Nirit Dudovich et al.; "Transform-Limited Pulses Are Not Optimal for Resonant Multiphoton Transitions"; Physical Review Letters, Vol. 86, No. 1; January 1, 2001; pgs. 47-50.	

Examiner:	Date Considered:
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EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)**

Ref. Desig.	Examiner's Initials	
274.		Dan Oron et al.; "Quantum control of coherent anti-Stokes Raman processes"; Physical Review A, Vol. 65; 2002; pgs. 043408-1-043408-4.
275.		Nirit Dudovich et al.; "Coherent Transient Enhancement of Optically Induced Resonant Transitions"; Physical Review Letters, Vol. 88, No. 12; March 25, 2002; pgs. 123004-1-123004-4.
276.		Jerome Degert et al.; "Realization of a Time-Domain Fresnel Lens with Coherent Control"; Physical Review Letters, Vol. 89, No. 20; November 11, 2002; pgs. 203003-1-203003-4.
277.		M. Wollenhaupt et al.; "Interferences of Ultrashort Free Electron Wave Packets"; Physical Review Letters, Vol. 89, No. 17; October 21, 2002; pgs. 173001-1-173001-4.
278.		R. Teets et al.; "Coherent Two-Photon Excitation by Multiple Light Pulses"; Physical Review Letters, Vol. 38, No. 14; April 4, 1977; pgs. 760-764.
279.		B. Broers et al.; "Large interference effects of small chirp observed in two-photon absorption"; Optics Communications 91; 1992; pgs. 57-61.
280.		R.R. Jones; "Multiphoton Ionization Enhancement Using Two Phase-Coherent Laser Pulses"; Physical Review Letters, Vol. 75, No. 8; August 21, 1995; pgs. 1491-1494.
281.		D.J. Maas et al.; "Vibrational ladder climbing in NO by ultrashort infrared laser pulses"; Chemical Physics Letters 270; May 16, 1997; pgs. 45-49.
282.		Christopher J. Bardeen et al.; "Quantum control of I <sub>2</sub> in the gas phase and in condensed phase solid Kr matrix"; J. Chem. Phys., Vol. 106, No. 20; May 22, 1997; pgs. 8486-8503.
283.		D.J. Maas et al.; "Vibrational ladder climbing in NO by (sub)picosecond frequency-chirped infrared laser pulses"; Chemical Physics Letters 290; 1998; pgs. 75-80.
284.		Vladislav V. Yakovlev et al.; "Chirped pulse enhancement of multiphoton absorption in molecular iodine"; Journal of Chemical Physics, Vol. 108, No. 6, February 8, 1998; pgs. 2309-2313.
285.		Radoslaw Uberna et al.; "Phase and amplitude control in the formation and detection of rotational wave packets in the E1Eg state of Li <sub>2</sub> "; Journal of Chemical Physics, Vol. 108, No. 22; pgs. 9259-9274.

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)**

Ref. Desig.	Examiner's Initials	
286.		John M. Papanikolas et al.; "Erratum: Manipulation of rovibrational wave packet composition in the Li <sub>2</sub> E(Eg) shelf state using intermediate state selection and shaped femtosecond laser pulses"; J. Chem Phys. 107, 4172; 1997; pg. 10830.
287.		T.C. Weinacht et al.; "Measurement of the Amplitude and Phase of a Sculpted Rydberg Wave Packet"; Physical Review Letters; Vol. 80, No. 25; June 22, 1998; pgs. 5508-5511.
288.		Radoslaw Uberna et al.; "Phase control of wavepacket dynamic using shape femtosecond pulses"; Faraday Discuss, Vol. 113; 1999; pgs. 385-400.
289.		T.C. Weinacht et al.; "Toward Strong Field Mode-Selective Chemistry"; J. Phys. Chem. A, Vol. 103, No. 49; 1999; pgs. 10166-10168.
290.		Mohamed Aziz Bouchene et al.; "Wavepacket interferometry with chirped pulses"; J. Phys. B At. Mol. Opt. Phys. 32; 1999; pgs. 5167-5177.
291.		D.J. Maas et al.; "Rotational interference in vibrational ladder climbing in NO by chirped infrared laser pulses"; Physical Review A, Vol. 60, No. 2; August 1999; pgs. 1351-1362.
292.		R. van Leeuwen et al.; "Coherent Control of the Energy and Angular Distribution of Autoionized Electrons"; Physical Review Letters, Vol. 82, No. 14; April 5, 1999; pgs. 2852-2855.
293.		Celine Nicole et al.; "Saturation of wave-packet interferences: Direct observation of spin precession in potassium atoms"; Physical Review A, Vol. 60, No. 3; September 1999; pgs. R1755-R1758.
294.		Mohamed Aziz Bouchene et al.; "Interplay between wave packet interferences and second harmonic generation"; Optics Communications 181; 2000; pgs. 327-336.
295.		Radoslaw Uberna et al.; "Ultrafast spectroscopy of wavelength-dependent coherent photoionization cross sections of Li <sub>2</sub> wave packets in the E1Eg state: The role of Rydberg states"; Journal of Chemical Physics, Vol. 114, No. 23; June 15, 2001; pgs. 10311-10320.
296.		Lorenzo Pesce et al.; "Quantum dynamics simulation of the ultrafast photoionization of Li <sub>2</sub> "; Journal of Chemical Physics, Vol. 114, No. 3; January 15, 2001; pgs. 1259-1271.
297.		M.F. DeCamp et al.; "Dynamics and coherent control of high-amplitude optical phonons in bismuth"; Physical Review B, Vol. 64; 2001; pgs. 092301-1-092301-3.

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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July 28, 2003	

**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)**

Ref. Desig.	Examiner's Initials	
298.		J. Ahn et al.; "Quantum Phase Retrieval of a Rydberg Wave Packet Using a Half-Cycle Pulse"; Physical Review Letters, Vol. 86, No. 7; February 12, 2001; pgs. 1179-1182.
299.		Sebastien Zamith et al.; "Observation of Coherent Transients in Ultrashort Chirped Excitation of an Undamped Two-Level System"; Physical Review Letters, Vol. 87, No. 3; July 16, 2001; pgs. 033001-1-033001-4.
300.		Hans U. Stauffer et al.; "Simultaneous phase control of Li <sub>2</sub> wave packets in two electronic states"; Journal of Chemical Physics, Vol. 116, No. 3; January 15, 2002; pgs. 946-954.
301.		Joshua B. Ballard et al.; "Optimization of wave packet coefficients in Li 2 using an evolutionary algorithm: The role of resonant and nonresonant wavelengths"; Journal of Chemical Physics, Vol. 116, No. 4; January 22, 2002; pgs. 1350-1360.
302.		Elizabeth Mirowski et al.; "Effect of nonresonant frequencies on the enhancement of quantum beat amplitudes in rovibrational states of Li <sub>2</sub> : The role of state spacing"; Journal of Chemical Physics, Vol. 117, No. 24; December 22, 2002; pgs. 11228-11238.
303.		S.N. Pisharody et al.; "Phase-controlled stair-step decay of autoionizing radial wave packets"; Physical Review A, Vol. 65; 2002; pgs. 033418-1-033418-10.
304.		R. Netz et al.; "Coherent population dynamics of a three-level atom in spacetime"; Physical Review A, Vol. 65; pgs. 043406-1-043406-12.
305.		Joshua B. Ballard et al.; "Simultaneous control of time-dependent population transfer dynamics and wave-packet quantum interferences in Li <sub>2</sub> by shaped ultrafast pulses"; Physical Review A 66; 2002; pgs. 043402-1-043402-7.
306.		Dan Oron et al.; "Narrow-Band Coherent Anti-Stokes Raman Signals from Broad-Band Pulses"; Physical Review Letters, Vol. 88, No. 6; February 11, 2002; pgs. 063004-1-063004-4.
307.		M.M. Salour et al.; "Observation of Ramsey's Interference Fringes in the Profile of Doppler-Free Two-Photon Resonances"; Physical Review Letters, Vol. 38, No. 14; April 4, 1977; pgs. 757-760.
308.		N.F. Scherer et al.; "Time resolved dynamics of isolated molecular systems studied with phase-locked femtosecond pulse pairs"; J. Chem Phys. Vol. 93, No. 1; July 1, 1990; pgs. 856-857.

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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July 28, 2003	

**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)**

Ref. Desig.	Examiner's Initials	
309.		J.S. Melinger et al.; "Adiabatic population inversion in I <sub>2</sub> vapor with picosecond laser pulses"; J. Chem. Phys. Vol. 95, No. 3; August 1, 1991; pgs. 2210-2213.
310.		J.J. Gerdy et al.; "Femtosecond selective control of wave packet population"; Chemical Physics Letters, Vol. 171, No. 1, /2; July 27, 1990; pgs. 1-4.
311.		Norbert F. Scherer et al.; "Fluorescence-detected wave packet interferometry: Time resolved molecular spectroscopy with sequences of femtosecond phase-locked pulses"; J. Chem. Phys., Vol. 95, No. 3; August 1, 1991; pgs. 1487-1511.
312.		N.F. Scherer et al.; "Fluorescence-detected wave packet interferometry. II. Role of rotations and determination of the susceptibility"; J. Chem. Phys., Vol. 96, No. 6; March 15, 1992; pgs. 4180-4194.
313.		L.D. Noordam et al.; "Redistribution of Rydberg States by Intense Picosecond Pulses"; Physical Review Letters, Vol. 68, No. 10; March 9, 1992; pgs. 1496-1499.
314.		J.S. Melinger et al.; "Generation of Narrowband Inversion with Broadband Laser Pulses"; Vol. 68, No. 13; March 30, 1992; pgs. 2000-2003.
315.		B. Broers et al.; "Efficient Population Transfer in a Three-Level Ladder System by Frequency-Swept Ultrashort Laser Pulses"; Physical Review Letters, Vol. 69, No. 14; October 5, 1992; pgs. 2062-2065.
316.		B. Broers et al.; "Diffraction and focusing of spectral energy in multiphoton processes"; Physical Review A, vol. 46, No. 5; September 1, 1992; pgs. 2749-2756.
317.		R.R. Jones et al.; "Ramsey Interference in Strongly Driven Rydberg Systems"; Physical Review Letters, Vol. 71, No. 16; October 18, 1993; pgs. 2575-2578.
318.		J.F. Christian et al.; "Rubidium electronic wavepackets probed by a phase-sensitive pump-probe technique"; Optics Communications, Vol. 103, No. 1/2; November 1, 1993; pgs. 79-84.
319.		J.S. Melinger et al.; "Adiabatic population transfer with frequency-swept laser pulses"; J. Chem. Phys. Vol. 101, No. 8; October 15, 1994; pgs. 6439-6454.
320.		P. Balling et al.; "Interference in climbing a quantum ladder system with frequency-chirped laser pulses"; Physical Review A, Vol. 50, No. 5; November 1994; pgs. 4276-4285.

Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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<b>OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)</b>			
Ref. Desig.	Examiner's Initials		
321.		D.W. Schumacher et al.; "Phase Dependence of Intense Field Ionization: A Study Using Two Colors"; Physical Review Letters, Vol. 73, No. 10; September 5, 1994; pgs. 1344-1347.	
322.		L. Marmet et al.; "Observation of Quasi-Landau Wave Packets"; Physical Review Letters, Vol. 72, No. 24; June 13, 1994; pgs. 3779-3782.	
323.		Valerie Blanchet et al.; "One-color coherent control in Cs2 Observation of 2.7 fs beats in the ionization signal"; Chemical Physics Letters, Vol. 233; February 25, 1995; pgs. 491-499.	
324.		R.R. Jones et al.; "Bound-state interferometry using incoherent light"; J. Phys. B 28 At. Mol. Opt. Phys.; 1995; pgs. L405-L411.	
325.		D.W. Schumacher et al.; "Programmable cesium Rydberg wave packets"; Physical Review A, Vol. 52, No. 6; December 1995; pgs. 4719-4726.	
326.		R.R. Jones; "Interference Effects in the Multiphoton Ionization of Sodium"; Physical Review Letters, Vol. 74, No. 7; February 13, 1995; pgs. 1091-1094.	
327.		Bern Kohler et al.; "Quantum Control of Wave Packet Evolution with Tailored Femtosecond Pulses"; Physical Review Letters, Vol. 74, No. 17; April 24, 1995; pgs. 3360-3363.	
328.		V.A. Apkarian; "Comment on "Time-resolved laser induced harpoon reactions"; J. Chem. Phys. Vol. 106, No. 12; March 22, 1997; pgs. 5298-5299.	
329.		M. Ovchinnikov et al.; "Quantum interference in resonant Raman spectra of I2 in condensed media"; J. Chem. Phys., Vol. 106, No. 13; April 1, 1997; pgs. 5775-5778.	
330.		Richard M. Williams et al.; "Compositional control of rovibrational wave packets in the E(1Eg) "shelf" state of Li2 via quantum-state-resolved intermediate state selection"; J. Chem. Phys. Vol. 106, No. 20; May 22, 1997; pgs. 8310-8323.	
331.		John M. Papanikolas et al.; "Manipulation of rovibrational wave packet composition in the Li2 E(1Eg) shelf state using intermediate state selection and shaped femtosecond laser pulses"; J. Chem. Phys., Vol. 107, No. 11; September 15, 1997; pgs. 4172-4178.	
332.		R.B. Vrijen et al.; "Limitations on quantum ladder climbing in complex systems"; Physical Review A, Vol. 56, No. 3; September 1997; pgs. 2205-2212.	

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Ref. Desig.	Examiner's Initials	
333.		Valerie Blanchet et al.; "Temporal Coherent Control in Two-Photon Transitions: From Optical Interferences to Quantum Interferences"; Physical Review Letters, Vol. 78, No. 14; April 7, 1997; pgs. 2716-2719.
334.		R. Zadoyan et al.; "Wavepacket diagnosis with chirped probe pulses"; Chemical Physics, Vol. 233; 1998; pgs. 353-363.
335.		M.A. Bouchene et al.; "Temporal coherent control induced by wave packet interferences in one and two photon atomic transitions"; The European Physical Journal D, Vol. 2; 1998; pgs. 131-141.
336.		Valerie Blanchet et al.; "Temporal coherent control in the photoionization of Cs2: Theory and experiment"; Journal of Chemical Physics, Vol. 108, No. 12; March 22, 1998; pgs. 4862-4876.
337.		R.A. Bartels et al.; "Nonresonant Control of Multimode Molecular Wave Packets at Room Temperature"; Physical Review Letters, Vol. 88, No. 3; January 21, 2002; pgs. 033001-1 through 033001-4.
338.		J. M. Dudley, et al.; "Direct measurement of pulse distortion near the zero-dispersion wavelength in an optical fiber by frequency-resolved optical gating"; Optics Letters, Vol. 22, No. 7; April 1, 1997; 457-459.
339.		D. Meshulach et al.; "Adaptive real-time femtosecond pulse shaping"; J. Opt. Soc. Am. B, Vol. 15, No. 5; May 1998; pgs. 1615-1619.
340.		D. Zeidler et al.; "Adaptive compression of tunable pulses from a non-collinear-type OPA to below 16 fs by feedback-controlled pulse shaping"; Appl. Phys. B 70 [Suppl.], S125-S131 (2000)/ Digital Object Identifier (DOI) 10.1007/s003400000306.
341.		David C. Clary; "Quantum Theory of Chemical Reaction Dynamics"; Science, Vol. 279, March 20 1998; pg. 1879.

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